

REMARKS

Claims 1-26 are active in the present application. Claims 13-26 are drawn to elected subject matter and find support in Claims 1-12 and the specification as originally filed. No new matter is believed to have been added by these amendments.

The present invention provides a method for producing a purine nucleoside by fermentation in which a microorganism is cultured in a medium to produce and accumulate the purine nucleoside where the microorganism is of the genus *Escherichia* and has acquired a purine nucleoside producing ability due to an increase in enzyme activity involved in purine nucleoside biosynthesis. The invention as presently claimed is not described in Okumura et al (U.S. Patent No. 3,258,408) and as such favorable reconsideration and allowance of the pending claims is solicited.

The rejection of Claim 13 under 35 U.S.C. §102(b) over Okumura et al is respectfully traversed.

Claim 13 as amended herein provides a method of producing a purine nucleoside using a microorganism which has acquired purine nucleoside producing ability due to an increase in enzymatic activity involved in purine nucleoside biosynthesis.

Okumura et al teach mutants of *Escherichia coli* which were obtained by exposing a non-mutant microorganism to ultraviolet light, X-rays, gamma radiation or placed in a solution of sodium nitrate (see column 1, lines 43-47). Okumura et al further disclose that the mutants obtained are auxotrophic¹: Okumura et al describe that the artificial mutant "required guanine, adenine, or both in their culture medium or can be grown provided the necessary purine basis or corresponding derivatives are present (see column 2, lines 42-50);

¹a mutant strain of an organism that has lost the ability to synthesize a particular nutrient growth factor and must obtain it from its environment to survive.

and exemplifies a mutant *Escherichia coli*, which requires adenine for growth (see col. 2, lines 64-66).

In sum, the strain deficient for synthesizing a particular nutrient growth factor, as in Okumura et al, is not the same as the microorganism employed in the instant method, which has an increased enzyme activity involved in purine biosynthesis. Therefore, the instant claims are not anticipated by the Okumura et al disclosure.

Furthermore, the instant claims are not obvious in view of Okumura et al because Okumura et al simply fails to suggest increasing an enzyme activity, which is involved in purine biosynthesis.

In view of the foregoing, withdrawal of this ground of rejection is requested.

The objection of Claim 13 is obviated by amendment. Claim 13 is now an independent claim.

Applicants submit that the present application is now in a condition for allowance.

Early notification of such allowance is earnestly solicited.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.



Norman F. Oblon
Attorney of Record
Registration No. 24,618

Daniel J. Pereira, Ph.D.
Registration No. 45,518

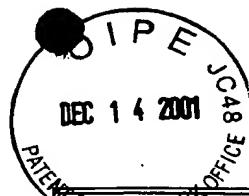


22850

(703) 413-3000
NFO/DJP/smi

H:\00101075-am.wpd

0010-1075-0 PCT



Marked-Up Copy
Serial No: 09/462,472
Amendment Filed on:
December 14, 2001

IN THE CLAIMS

Please amend the claims as follows:

--13. (Amended) A method for producing a purine nucleoside by fermentation comprising culturing [the] a microorganism [as defined in any one of claims 1-12] in a culture medium to produce and accumulate the purine nucleoside in the medium, and collecting the purine nucleoside, wherein the microorganism belongs to the genus Escherichia and has acquired purine nucleoside-producing ability because of an activity increase of an enzyme involved in purine nucleoside biosynthesis in cells of the microorganism.

Claims 14-26 (New).--

RECEIVED
DEC 20 2001
TECH CENTER